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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/023,344	12/17/2001	Hirokazu Miwa	0941.66061	7994	
75	90 08/23/2006	EXAMINER			
Patrick G. Burns, Esq. GREER, BURNS & CRAIN, LTD.			LAO, LUN YI		
Suite 2500	3 & CRAIN, LID.	ART UNIT	PAPER NUMBER		
300 South Wacker Dr.			2629		
Chicago, IL 60606			DATE MAILED: 08/23/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary		A	Application No. Appli		pplicant(s)	plicant(s)			
		10	0/023,344	MIWA ET AL.					
		Ex	aminer	Α	rt Unit				
		LU	JN-YI LAO	2	629				
Period fo	The MAILING DATE of this communic or Reply	ation appear	s on the cover sheet w	with the cor	respondence ad	ldress			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOCHEVER IS LONGER, FROM THE MA nations of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this community of the properties of the provision of period for reply is specified above, the maximum stature to reply within the set or extended period for reply within the se	ILING DATE 37 CFR 1.136(a) nication. tory period will ap II, by statute, caus	OF THIS COMMUN In no event, however, may a ply and will expire SIX (6) MO se the application to become A	IICATION. a reply be timely  ONTHS from the ABANDONED (	filed mailing date of this co 35 U.S.C. § 133).				
Status									
1)⊠	Responsive to communication(s) filed	on 13 June	2006						
2a)□									
′=	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is								
,—	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims								
4)⊠	Claim(s) 1 and 4 is/are pending in the	application.							
-	4a) Of the above claim(s) is/are withdrawn from consideration.								
5)[	Claim(s) is/are allowed.								
6)⊠	Claim(s) 1 and 4 is/are rejected.								
7)	Claim(s) is/are objected to.								
8)□	Claim(s) are subject to restriction	on and/or ele	ection requirement.						
Applicati	on Papers								
9)	The specification is objected to by the	Examiner.							
	The drawing(s) filed on is/are: a		ed or b) objected to	by the Exa	aminer.				
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
	Replacement drawing sheet(s) including the	ne correction i	s required if the drawin	g(s) is objec	ted to. See 37 CF	FR 1.121(d).			
11)[	The oath or declaration is objected to b	y the Exami	ner. Note the attache	ed Office Ad	ction or form PT	ΓO-152.			
Priority ι	ınder 35 U.S.C. § 119								
	Acknowledgment is made of a claim fo	r foreign pric	ority under 35 U.S.C.	§ 119(a)-(c	d) or (f).				
a)	☑ All b) ☐ Some * c) ☐ None of:								
	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
	3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).								
* 5	See the attached detailed Office action	·	, ,,	t received					
			io co. anod copies no	a reconved.					
Attachmen	t(s)								
	e of References Cited (PTO-892)		4) Interview						
	e of Draftsperson's Patent Drawing Review (PTC nation Disclosure Statement(s) (PTC-1449 or PT			o(s)/Mail Date. Informal Pate	nt Application (PTC	D-152)			
	r No(s)/Mail Date <u>12/17/2001</u> .	. 3,33,00)	-	Other:					

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### **DETAILED ACTION**

# Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Matsueda et al(20020003521).

Matsueda et al teach a liquid crystal display comprising: a display part displaying an image in accordance with image display data(DA) supplied through data signal lines(902)(see figures 1, 6, 8, 10); and a driving part driving each data signal line(902) of the data signal lines(902) by using a plurality of driving devices(211-216, 271-276, 321-325, 341-345) together simultaneously so as to increase the driving capability, wherein the plurality of driving devices (211-216, 271-276, 321-325, 341-345) are disposed on the same side of the data signal lines(902); wherein the number of the driving devices(211-216, 271-276, 321-325, 341-345) used for driving each data signal line(902) is controlled in accordance with a particular type of the display part (different gray scale levels; e.g. 6 bits or 8 bits or N bits)(see figures 1, 6, 8, 10, 21 and

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paragraphs 12-14 and 155), and wherein control of the number of driving devices is made with the use of a switch signal(see figures 1, 6, 8, 10 and paragraphs 92-93, 132-133 and 163).

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsueda et al in view of Ichikawa et al(5,028,916).

Matsueda et al fail to disclose a wiring part provided on a substrate on which the display part is formed.

As to claim 4, Ichikawa et al teach an LCD display comprising a wiring part integrated with a display part on a substrate(14)(see figures 1, 7-11; column 7, lines 39-68 and column 8, lines 1-33). It would have been obvious to have modified Matsueda et al with the teaching of Ichikawa et al, so as to eliminate cumbersome interconnection between the display panel and the drive circuit section, and improve operation reliability, as well as a low assembly cost(see column 8, lines 18-33).

## Response to Arguments

5. Applicant's arguments with respect to claims 1 and 4 have been considered but are most in view of the new ground(s) of rejection.

### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tomita et al(6,265,889) teach a plurality driving device(SW1A, SW1B) for driving a data line(X1) simultaneously.

Yamamoto et al(US 20020030648) teach an LCD display having a plurality of driving circuits.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi Lao whose telephone number is 571-272-7671. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

August 19, 2006

Lun-yi Lao

**Primary Examiner**